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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,740	12/21/2001	William E. Webler	ACSC 60272 (3082)	5365

7590

08/07/2003

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EXAMINER

LIN, JEYUHU

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,740

Applicant(s)

WEBLER, WILLIAM E.

Examiner

Jeoyuh Lin

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5&7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

-Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-In claim 1, it is unclear as to which two components the transmission elements transfer image information in between.

-In claim 2, it is unclear as to how the control component is connected with the rest of the system.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

-Claims 1-10, 12-14, 17-19, 21-25, 29, and 32-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Boppart et al. (6,485,413)

Boppart teaches a method and apparatus for acquiring imaging information from body lumen, comprising the following:

- Image acquiring component to detect image info, such as an optical guidewire, as claims 3 and 7 disclose. (Column 2, lines 45-50)
- Image storage component-store image in readable form, such as a videotape, as claims 8-10. (Column 25, lines 15-19)
- Image playback component to read stored info and output electronic signal, in the form of a processor that produces an image output from stored signal. (Column 39, lines 40-43)
- Transmission element to transfer info between said components, in the form of electrical wires. (Column 34, lines 1-5)
- Control component, as claim 2 discloses, with the ability to recall previously stored data, which would inherently have to locate data address, as claims 12 and 13 disclose. (Column 9, lines 66 and 67 and column 10, lines 1-7)
- Rotating image acquirer within a shaft to perform a rotational scan, as claims 4 and 5 disclose. (Figure 21a and column 31, lines 65-67 and column 32, lines 1-33)
- A pathway, such as a window or transparent sheath, as claim 6 discloses. (Column 32, line 18 and column 33, line 67)
- Gating imaging acquisition, which would inherently result in discrete and sequential image acquisition, with an image acquisition rate, as claim 14 teach. (Column 32, line 67 and column 33, lines 1-7) No image playback rate is disclosed, but video playback would inherently require a certain playback rate.
- Display, as claims 17 and 18 teach (Column 10, lines 10-15)

-Claims 19, 21, 22 comprise method claims that substantially disclose a method of use of the apparatus established by rejected apparatus claims, and therefore comprise similar rejectable subject matter.

-Stored information comprising direction and velocity of the image acquirer, which inherently includes location information related to image, as claim 23 teaches. (Column 13, lines 40-55)

-Displaying image sequence (Column 5, line 40), such as a filtered image which would be inherent after filtering as part of image processing, followed by display on CRT, or a summed image, (Column 13, line 40) as claim 24 teaches. (Column 6, lines 1-27)

-Image modification method, such as Fourier analysis, as claim 25 teaches (Column 6, lines 12-27)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

-Claims 11, 15, 16, 20, 26-28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boppart et al.

Boppart meets all the claims except that it fails to teach permanent storage device.

However, it is well known in the art medical imaging to one having ordinary skills at the time the invention was made that medical data can be stored permanently as medical records. Also, Boppart fails to acquiring imaging in a body lumen about 10 cm, or 7 cm in length, as claims 27

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and 28 teach. However, it does teach using the device in natural orifice, canals, tubes, and vessels in the body, such as cervical or transurethral imaging. Depending on the application of the device, the length of the body lumen would vary, and that it would be an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to adapt the device for use in a particular lumen length. Boppart further fails to teach the length of the acquiring step, as claim 26 teaches. However, it would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to set the acquisition time, depending on the length and size of the imaging area, and the imaging rate established. Additionally, Boppart fails to teach variable playback rate, as claims 15, 16, 20, 30, and 31 disclose in various scopes. However, it would have been an obvious matter of design choice to one having ordinary skill in the art of medical imaging and analysis at the time the invention was made to speed up or slow down playback rate in relation to image acquisition rate in reviewing image data and analyze the details of a captured image.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Lemelson (6,400,980 B1) teaches a multi-modal imaging device for body lumen imaging comprising a rotatable imaging system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeoyuh Lin whose telephone number is (703) 306-5990. The examiner can normally be reached on m-f, 8:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on (703) 308-3256. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-0758 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

JYL

JYL

July 30, 2003

George Manuel
George Manuel